

Date: Monday, 2/4/2008 11:23:38 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BEAM ASSEMBLY
Job Number : 37157	
Estimate Number : 10407	
P.O. Number :	Part Number : D3173041
This Issue : 2/4/2008 S.O. No. :	Drawing Number : D3173 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : B
Previous Run : 31119	Material :
Written By : <u>                    </u>	Due Date : 2/18/2008 Qty: 3 Um: Each
Checked & Approved By : <u>                    </u>	
Comment : Est. A 02.12.05 New issue KJ/RF	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6TR40X20W125	6061-T6 Rect Tube W.125
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Comment: Qty.: 4.9219 f(s)/Unit Total : 14.7656 f(s)

6061-T6 Rect Tube W.125

Material: 6061-T6 (QQ-A-200/8) Rect. Tube 4" x 2" x 0.125 thick

(M6061T6TR4.0x2.0W125)

Batch M19265x2

M14344x1

mr 08/02/18 3

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW

Cut blank: 56" long

Machine holes as per Folio FA295 and Dwg D3173

Identify as D3173-1

mr 08/02/18 3

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Machine holes as per Folio FA295 and Dwg D3173 Identify as D3173-1

mr 08/02/18 3

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mr 08/02/18 3

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

mr 08/02/18 3

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3173-041 PAR #: N/A Fault Category: Prod / Machine <sup>PAT</sup> NCR: (Yes) No DQA: D Date: 08/02/19  
 QA: N/C Closed: HJ Date: 08.02.22

NCR: <u>37/5-7</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>08/01/19</u>	<u>#30</u>	one D3173-041 was cut 0.060" too short also with a large cut in one end. RC. Human error at machine shop.	<u>CP</u> <u>08.02.19</u> <u>DS1642</u>	Scrap and Destroy qty <u>(10)</u> no replace	<u>08/02/19</u> <u>FF</u>	<u>J</u> <u>08/02/19</u>	<u>CP</u> <u>08.02.19</u> <u>DS1642</u>	<u>J</u> <u>08/01/19</u>

NOTE: Date & initial all entries

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Drawing Name: BEAM ASSEMBLY

Job Number: 37157

Part Number: D3173041

Job Number:



Seq: #:

Machine Or Operation:

Description:

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Deburr

FF 08-02-19 (3)

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

08/02/19 (42)

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Drill Ø0.316" holes as per Dwg D3173  
C'sink holes as per Dwg D3173

FF 08-02-19 (3)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/02/19 (42)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1  
Chemical Conversion Coat as per QSI 005 4.1

FF 08/02/19 (2)

11.0

D3178041

Nut Plate



Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)  
Nut Plate  
Pick K10017. Install Nut Plate as per Dwg D3173. D3178-041 is included in K10017 BOM.  
Pick:

Qty	Part Number	Description	Batch
2	D3178-041	Nut Plate	B 24095B

FF 08-02-19 (2)

12.0

MS20601AD4W4

Rivet



Comment: Qty.: 8.0000 Each(s)/Unit Total: 24.0000 Each(s)  
Rivet  
Pick:

Qty	Part Number	Description	Batch
8	MS20601AD4W4	Rivet	B 19278

FF 08-02-19 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: BEAM ASSEMBLY

Job Number: 37157

Part Number: D3173041

Job Number:



Seq. #:

Machine Or Operation:

Description:

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/02/19 (2)

14.0

POWDER COATING

POWDER COATING



M 107005



(2X)

Comment: POWDER COATING

Powder Coat Gloss White (Ref: 4.3.5.1) per QSI 005 4.3  
Ensure Nut Plate thread is covered.

m-l 08/02/19

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08/02/19 (2)

16.0

D3175041

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)

Mounting Lug

Assemble per Dwg D3173. Install Mounting Lug as per Dwg D3173. D3175-041 is included in K10017

BOM.

Pick:

Qty	Part Number	Description	Batch
2	D3175-041	Mtg Lug	25025

AS 08/02/20 2 (2)

17.0

AN35A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total: 24.0000 Each(s)

Bolt

Pick:

Qty	Part Number	Description	Batch
8	AN3-5A	Bolt	19356

AS 08/02/20 2 (2)

18.0

AN523A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)

Bolt

Pick:

Qty	Part Number	Description	Batch
2	AN5-23A	Bolt	19278

AS 08/02/20 2 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 2/4/2008 11:23:39 AM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEAM ASSEMBLY

Job Number: 37157

Part Number: D3173041

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

AN960JD10

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 24.0000 Each(s)

Washer

Pick:

Qty

Part Number

Description

Batch

8

AN960JD10

Washer

106167

AS 08/02/20 2

20.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Washer

Pick:

Qty

Part Number

Description

Batch

4

AN960JD516

Washer

106054

AS 08/02/20 2

21.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Pick:

Qty

Part Number

Description

Batch

2

MS21042L5

Nut

106277

AS 08/02/20 2

22.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble per Dwg D3173.

Install Mounting Lug as per Dwg D3173. D3175-041 is included in K10017 BOM.

FF 08-02-20 2

23.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-02-20 2

24.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify as D3173-041 and Pack with D130-701-041

Location: 57202

08/2/20 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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Job Number: 37157

Part Number: D3173041

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

QC21

FINAL INSPECTION/W/O RELEASE



②

Comment: FINAL INSPECTION/W/O RELEASE

D08102/01

Job Completion



in 2008/2/20 (2)

h

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3173	REV. B SHEET 1 OF 3
DATE 03.01.07		TITLE BEAM ASSEMBLY	SCALE NTS
A	02.12.03	NEW ISSUE	
B	03.01.07	REMOVE PIP PINS	

## PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3173-041	BEAM ASSEMBLY
1	D3173-1	BEAM
2	D3175-041	MOUNTING LUG
2	D3178-041	NUT PLATE
8	AN960JD10	WASHER
4	AN960JD516	WASHER
2	MS21042L5	NUT
8	MS20601AD4W4	RIVET
8	AN3-5A	BOLT
2	AN5-23A	BOLT

## NOTES

### D3173-1 BEAM:

- 1) PART IS SYMMETRICAL ABOUT CENTERLINE
- 2) MATERIAL: 6061-T6 RECTANGULAR TUBING, 4" x 2" x 0.125" WALL (QQ-A-200/8)  
(REF DART SPEC. M6061T6TR4.0x2.0W125)
- 3) BREAK ALL SHARP EDGES 0.010-0.020
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3 OUTSIDE ONLY
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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WORK ORDER  
NO. **37157**

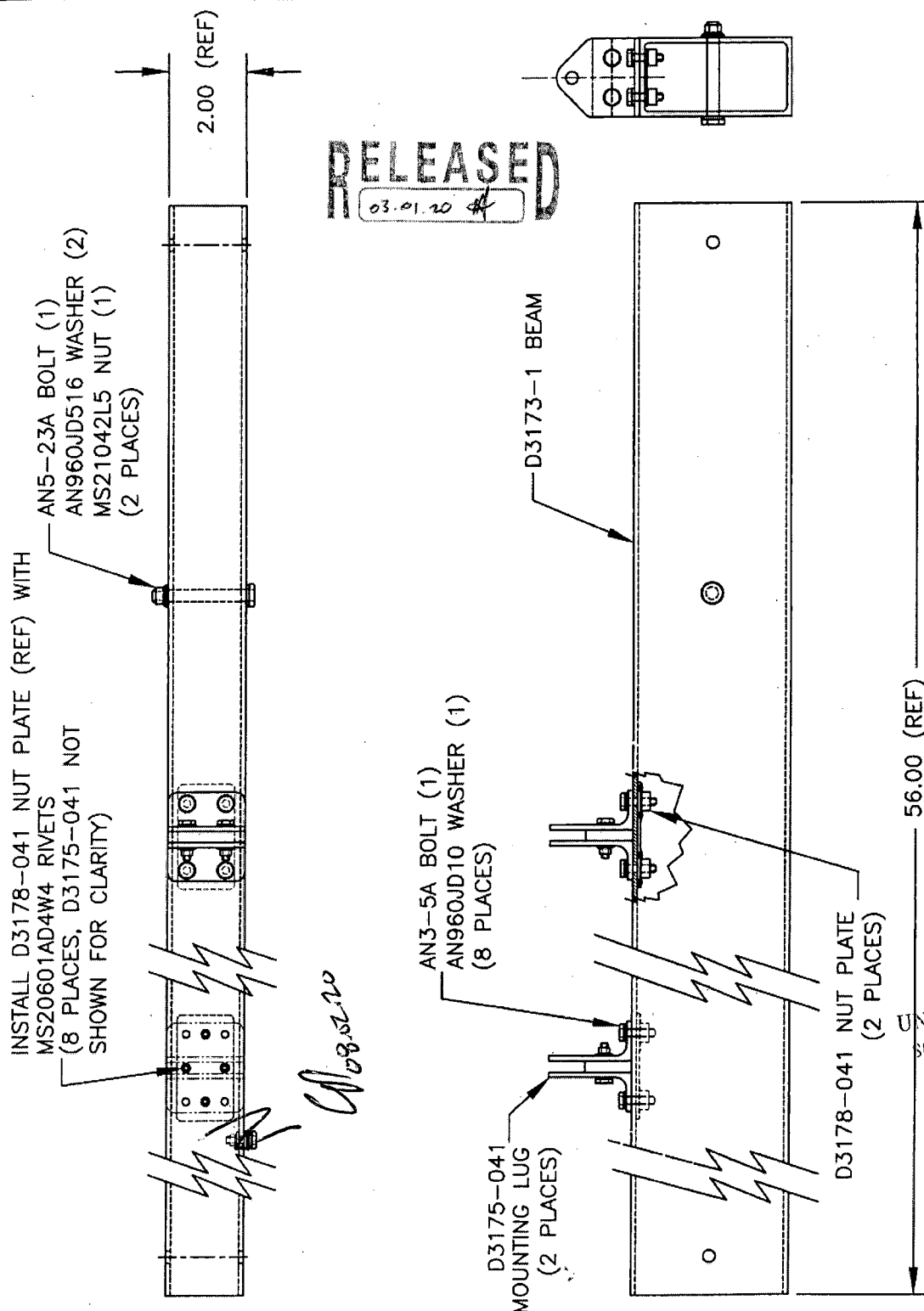
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03.01.20 *[Signature]*

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3173	REV. B SHEET 2 OF 3
DATE 03.01.07	TITLE BEAM ASSEMBLY		SCALE 1:4



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03.01.20

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WITHOUT NOTICE  
WORK ORDER  
NO. *37157*

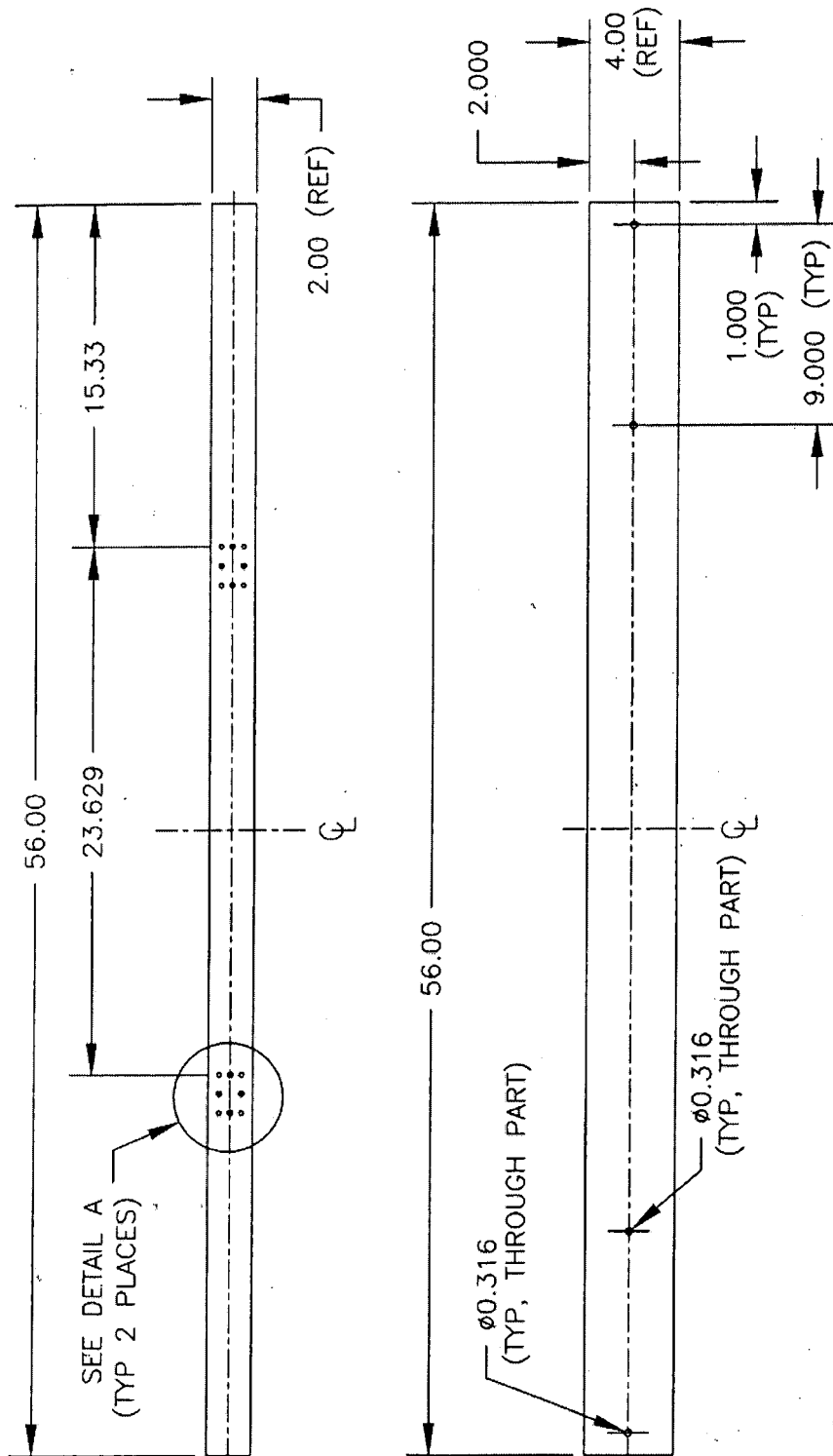
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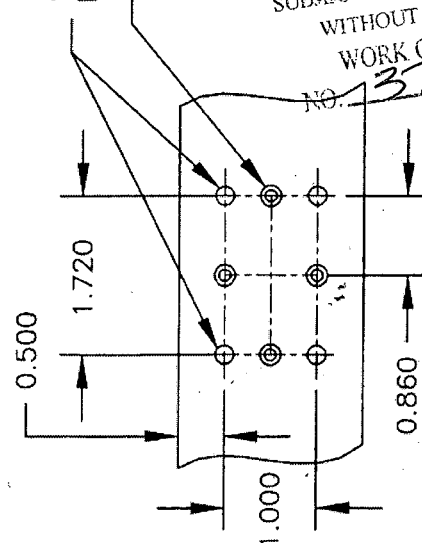
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CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3173	REV. B SHEET 3 OF 3
DATE 03.01.07	TITLE BEAM ASSEMBLY		SCALE 1:8

# D3173-1 BEAM



RELEASED  
03.01.20

Ø0.203 (TYP 8 PLACES TOTAL,  
DRILL THIS SURFACE ONLY)  
DRILL #30 (Ø0.129)  
C'SINK Ø0.235x100°  
(TYP 8 PLACES TOTAL,  
DRILL THIS SURFACE ONLY)



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